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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,566	01/18/2002	Rodney D. Borst	7359-6	1352

7590 03/25/2004

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EXAMINER
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LEE, EDMUND H

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/051,566	Applicant(s) BORST, RODNEY D.	
	Examiner EDMUND H. LEE	Art Unit 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. In accordance with the preliminary amendments filed 1/18/02, 2/13/02, 7/8/02, claim 28 is the only claim pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards (USPN 3418690) in view of White (USPN 4495135). Edwards teaches a method of vacuum thermoforming a container which an outer surface including an outwardly-projecting ridge, the container further including a base, side walls, and an inwardly-projecting cut lip (figs 1-11); providing a mold defining a cavity conforming in shape to the outer surface of the container, the cavity including an undercut portion corresponding to the ridge of the container, the molding including separable mold means 20 and plug 28, the mold means defining the undercut portion and further defining a surface corresponding to the side walls of the container, the plug defining a surface corresponding to the base of the container (figs 1-11); positioning a heated sheet of thermoplastic material over the mold (figs 1-11); drawing the heated sheet of thermoplastic material over the upper lip of the mold and down into the cavity and into the undercut portion of the mold (col 3, lns 19-21; figs 1-11); allowing the sheet of thermoplastic material to cool below the glass transition temperature to assure that it will retain its shape (figs 1-11)--such is inherent in order to prevent damage to the molded

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article and Edwards teaches that the sheet of thermoplastic is chilled while in contact with the mold (col 5, lns 33-36); cutting the thermoplastic material along thermoplastic material along the upper lip of the mold to separate the drawn thermoplastic material in the mold cavity from the remainder of the thermoplastic material, the separated, drawn thermoplastic material constituting the thermoformed container (figs 1-11); separating the mold means and the plug (figs 1-11); and removing the thermoformed container from the mold means and the plug (figs 1-11). However, Edwards does not teach using a three-part mold including a first portion having a planar upper surface, an upper lip and defining an upper part of the undercut portion, a second portion defining a lower part of the undercut portion, and the first and second portions of the mold being separable along a part line corresponding to the outermost extent of the ridge of the container.

White teaches vacuum thermoforming a container having an undercut flange (figs 3-8); and using a mold including a first portion having a planar upper surface, an upper lip and defining an upper part of an undercut portion, a second portion defining a lower part of the undercut portion, and the first and second portions of the mold being separable along a part line corresponding to the outermost extent of the ridge of the container (figs 3-8). Edwards and White are combinable because they are analogous with respect to removing a vacuum thermoformed container having an undercut flange from a molding cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate separable first and second portions as taught by White into the mold of Edwards in order to facilitate removal of the container having the

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undercut flange and to reduce the risk of damaging the container having the undercut flange during removal.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571.272.1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EHL

EDMUND H. LEE  
Primary Examiner  
Art Unit 1732

  
3/18/04